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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) 13111-00037-US1

Application Number	Filed
10/573,480-Conf. #2574	July 26, 2006

First Named Inventor: Samuel Nato et al

Art Unit	Examiner
1793	B. S. Saha

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant /inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 62,324
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____

/Georg M. Hasselmann/
Signature

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Typed or printed name

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Telephone number

December 13, 2010
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- [ ] *Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Samuel Neto et al.

Application No.: 10/573,480 Confirmation No.: 2574

Filed: July 26, 2006 Art Unit: 1793

For: METHOD FOR THE PRODUCTION OF A CATALYST FOR GAS-PHASE OXIDATIONS BY THE COATING OF SUPPORT MATERIALS IN A FLUID BED APPARATUS Examiner: B. S. Saha

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

Further to the Office Action dated August 11, 2010 finally rejecting claims 1-10 and 12-20 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,977,126 to Mauldin et al. in view of U.S. Patent No. 6,274,763 to Ruedinger et al., the Review Panel is respectfully requested to review the legal and factual basis of the rejection prior to the filing of an appeal brief in light of the following remarks.

Remarks/Arguments begin on page 2 of this paper.

REMARKS

Claims 1-10 and 12-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,977,126 to Mauldin et al. in view of U.S. Patent No. 6,274,763 to Ruedinger et al.

Claim 1 recites, among other features, that a parameter K defined as

$$K = 0.020\ Q_{gas} - 0.055\ Q_{susp} + 7.500\ B_{susp} - 0.667\ M_{support} + 2.069\ T_{gas} - 7$$

satisfies the relationship $127.5 \leq K \leq 202$.

As appreciated by the Examiner, the above-quoted features of claim 1 are not explicitly suggested in the applied citations. However, the Office Action states, at page 9, lines 5-6, that "'K' values would still remain within the range. It is a matter of scale up and normalization."

Applicants respectfully submit that neither Mauldin nor Ruedinger make any suggestion on how to scale-up the processes suggested therein, nor do they provide any guidance on how to derive appropriate normalization factors. What is more, the Office Action picks and chooses variables considered to correspond to Q_{gas}, Q_{susp}, and $M_{support}$ from the applied citations and applies some arbitrary scaling factors, but leaves the values for the variables considered to correspond to B_{susp} and T_{gas} constant. The Office Action, however, fails to explain why some variables are scaled and why some are held constant. In addition, the Office Action fails to explain how it is possible that the applied citations suggest features corresponding to the above-quoted calculation of parameter K if the factors considered to correspond to the variables B_{susp} and T_{gas} are constants.

Stated differently, the "matter of scale up and normalization" is not taught or suggested in the applied citations, and the Office Action failed to provide support why a skilled artisan would have modified parameters from the applied citations as set forth in the Office Action.

At the middle of page 9 the Office Action states that Applicants do not explicitly disclose the reason why B_{susp} and T_{gas} are not absolute parameters. Applicants note that the term "absolute

parameters" was used at page 8, line 3 from the bottom, of the December 16, 2009 Office Action to describe values found in the related art and listed in the table on page 8 of the December 16 Office Action. Specifically, the Office Action used the values from the related are without scaling, i.e., as constants because the Office Action uses the same values found in the related art for temperature and amount of binder, but scales all other values. Applicants merely followed the suggested nomenclature in the Office Action to describe a constant.

Accordingly, as best understood by Applicants, the Office Action asserts that the combination of Mauldin and Ruedinger suggests a process in which the values for temperature and amount of binder art to be held constant because they are "absolute parameters." The reason why Applicants noted that B_{susp} and T_{gas} are not "absolute parameters" for the calculation of K is that B_{susp} and T_{gas} are variables. See claim 1. Thus, Mauldin and Ruedinger cannot reasonably be considered to suggest the above-quoted features of claim 1 because, according to the Office Action, the process suggested in the applied citations does not provide for the factors considered to correspond to B_{susp} and T_{gas} as being variables.

Moreover, it can easily been demonstrated that the assertions in the Office Action are unfounded:

When using the lower boundary values of claim 3, the following value for parameter K is obtained in equation (1):

$$(1)\ K = 0.02*5500 - 0.055*2000 + 7.5*6 - 0.667*120 + 2.069*90 - 7 = 144.2$$

If now the upper boundary values of claim 3 are used, while leaving the values for the "absolute parameters" B_{susp} and T_{gas} constant, K, in equation (2) takes on the value:

$$(2)\ K = 0.02*6500 - 0.055*2500 + 7.5*6 - 0.667*180 + 2.069*90 - 7 = 96.7$$

Accordingly one has to observe:

- While in equation (1) K falls into the claimed range of claim 1, the K value resulting from equation (2) does not fall into the claimed range of claim 1. Thus, it is certainly not sufficient to select individual parameters of the claimed range, but one has also to observe that the interdependence of the individual variables in calculating parameter K introduces a further limitation with respect to suitable parameter values which have not remotely been suggested by the related art.

- The above equation (2) also shows that merely scaling up the allegedly "normalizable" parameters without adapting the "absolute parameters" B_{susp} and T_{gas} will result in a K value which is outside the claimed range. Thus, the present application teaches, via the definition of K, that, contrary to the skilled artisan's understanding, as provided in the Office Action, Bsusp and Tgas are no longer independent parameters but are interrelated with the heat and mass transfer parameters.

What is more, if it was a mere matter of normalization, one would expect that the original prior art parameter values from the table at page 8 of the Office Action would fall within the K range, as claimed. However, as can be taken from equations (3) and (4) below:

$$(3) \qquad K = 0.02*95 - 0.055*19 + 7500*3 - 0.667*0.4 + 2.069*40 - 7 = 98$$

$$(4) \qquad K = 0.02*640 - 0.055*294 + 7.500*6 - 0.667*22 + 2.069*110 - 7 = 247.5$$

neither the K value for the lower boundaries nor for the upper boundaries fall within the range. The Office Action then, at the top of page 9, asserts that, for example, a different value would be obtained if a different value from the range of 0.4 to 22.0 kg was selected instead of 1 kg. Thus, while using hindsight considerations, one may ultimately find suitable parameter combinations which provide a K value within the claimed range, there is no suggestion in the related art on how to derive these parameter combinations.

Additionally, even assuming that a skilled person would try to normalize the mass dependent parameters of the table at page 8 of the Office Action, the applied citations fail to

direct the skilled artisan on how to choose a suitable normalization factor. Using for instance the lower boundaries of $M_{support}$ would result in a factor of 150 (i.e. 60/0.4), while using the upper boundaries would result in a factor of 11 (i.e. 240/22). Thus, contrary to assertion in the Office Action, there is no unequivocal teaching regarding normalization in the related art at all.

At page 4, lines 7-9, the Office Action states in the absence of a binder, inorganic components do not adhere well to the support material. Applicants presume that the Office is taking official notice because no support in the applied citations is provided. Further, at page 3, lines 13-14, the Office Action states that Mauldin does not explicitly teach the composition of the binder.

Applicants respectfully submit that Mauldin does not teach the use of the binder in the preparation of the catalyst. Instead, as set forth at col. 6, lines 50-53, aqueous solutions of cobalt nitrate and perrhenic acid are used, which are sprayed onto the supports in fluid bed sprayers. No binder is suggested. Moreover, there is no indication in Mauldin that cobalt and rhenium do not adhere well to the support.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 13111-00037-US1 from which the undersigned is authorized to draw.

Dated: December 13, 2010

Respectfully submitted,

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